

CLAIM AMENDMENTS

Claim 1 (currently amended) A method for installing underground pipe under a ground supported structure, comprising:
forming first and second trenches in the ground
on opposite sides of the structure;

placing an axially elongated ground piercing tool in the first trench with a ground piercing tip of the tool facing the second trench;

driving the tool through the ground under the structure toward the second trench to form an in-ground tunnel between the first and second trenches; and

~~placing~~ depositing an underground pipe in the in-ground tunnel while pulling the tool rearward from the tunnel toward the first trench

wherein the step of placing
an underground pipe in the in-ground tunnel comprises:

pre-mounting the pipe on the tool with the pipe
extending between the tip and an end portion of the tool;

removing the tip from the tool; and

pulling the tool from the in-ground tunnel leaving the
pipe in place.

Claims 2 and 3 (canceled)

Claim 4 (currently amended) A system for installing underground pipe under a surface structure ~~according to the method of claim 2,~~ the system comprising:

an axially elongated ground piercing tool for forming an in-ground tunnel under a surface structure with a forward movement of the tool in the ground under the structure, the tool having a pointed tip portion threaded to a threaded forward end portion of an axially extending rod portion of the tool; and

a pipe carried by the rod portion and captured between an end surface of the tip end portion and an outwardly enlarged portion of the rod for depositing in the in-ground tunnel with a removal of the tip end portion from the rod portion and a pulling of the rod portion rearward leaving the pipe in place in the tunnel.

Claims 5 (currently amended) A system for installing underground pipe under a surface structure ~~according to the method of claim 3,~~ the system comprising:

an axially elongated ground piercing tool for forming an in-ground tunnel under a surface structure with a forward movement of the tool in the ground under the structure, the tool having a pointed tip portion including an externally threaded rearward extension for mating with an internally threaded cavity in a forward end of ~~threaded to a threaded forward end portion of~~ an axially extending rod portion of the tool; and

a pipe connector having a rearward threaded end portion for mating with and releasably connecting to the internally threaded cavity in the ~~threaded~~ forward end portion of the rod after a removal of the pointed tip portion from the rod and having a forward threaded end portion for mating with and releasably connecting to a rearward end portion of an underground pipe for pulling the pipe rearward through the in-ground tunnel with rearward removal of the tool from the tunnel.

Claims 6 and 7 (canceled)

Claim 8 (currently amended) The system of claim [[7]] 5 wherein the rearward threaded end portion of the pipe connector comprises an externally threaded extension for mating with the internally threaded cavity in the rod portion of the tool.

Claim 9 (previously presented) The system of claim 8 wherein the forward threaded end portion of the pipe connector comprises an internally threaded cavity for receiving an externally threaded rearward end portion of the pipe.

Claim 10 (previously presented) The system of claim 8 wherein the forward threaded portion of the pipe connector comprises an axial extension carrying an externally threaded self tapping screw for cutting a thread in a hollow rearward end of a plastic pipe.

Claim 11 (currently amended) The system of claim [[7]] 5 wherein the rearward threaded end portion of the pipe connector comprises an internally threaded cavity for mating with an externally threaded extension from a forward end portion of the rod of the tool.

Claim 12 (previously presented) The system of claim 11 wherein the forward threaded end portion of the pipe connector comprises an internally threaded cavity for receiving an externally threaded rearward end portion of the pipe.

Claim 13 (previously presented) The system of claim 11 wherein the forward threaded portion of the pipe connector comprises an axial extension carrying an externally threaded self tapping screw for cutting a thread in a hollow rearward end of a plastic pipe.

Claim 14 (currently amended) A ground piercing tool for the system of claim 5, the tool comprising:

an axially elongated ground piercing tool for forming an in-ground tunnel under a surface structure with a forward movement of the tool in the ground under the structure, the tool having a pointed tip portion threaded to a threaded forward end portion of an axially extending rod portion of the tool, the rod portion including a forward facing end portion engaging a rearward facing portion of the tip portion to transmit axial driving forces from the rod portion to the tip portion.

Claim 15 (currently amended) The tool of claim 14

wherein:

the tip portion of the tool includes an externally threaded rearward extension for mating with an internally threaded cavity in a forward end of the rod portion of the tool and

[[a]] the forward facing end portion of the rod is outward of the cavity and extends forward to engage [[a]] the rearward facing portion of the tip portion to transmit axial driving forces from the rod portion to the tip portion.

Claim 16 (currently amended) The tool of claim 14

wherein:

the tip portion of the tool includes an internally threaded rearward cavity for mating with an externally threaded forward extension from the rod portion of the tool and

[[a]] the forward facing end portion of the rod is outward of the externally threaded forward extension from the rod portion extends forward to engage the ~~engages a~~ rearward facing portion of the tip portion outward of the internally threaded rearward cavity in the tip portion to transmit axial driving forces from the rod portion to the tip portion.

Claim 17 (currently amended) A pipe connector for the system of claim 5, the pipe connector comprising:

a rearward threaded end portion for mating with and

releasably connecting to a threaded forward end portion of a rod and having a forward threaded end portion for mating with and releasably connecting to a rearward end portion of an underground pipe for pulling the pipe rearward through an in-ground tunnel with rearward removal of the rod from the tunnel, the forward threaded end portion including a self tapping screw for cutting a thread in a hollow rearward end of a plastic pipe.

Claims 18-23 (canceled)

Claim 24 (previously presented) A ground piercing tool for tunneling under preexisting surface structures, comprising:

- a ground piercing forward facing pointed tip including a rearward threaded portion and a radially extending shoulder outward of the threaded portion;

- an elongated axially extending first rod including

- a forward threaded portion for mating with the rearward threaded portion of the tip,

- a first radially extending shoulder outward of the forward threaded portion for engaging the radially extending shoulder of the tip and

- a rearward threaded portion for mating with a forward threaded portion of an end cap or a second rod of

the tool; and

an end cap having a rearward facing axial impact surface and a forward threaded portion for mating with a rearward threaded portion of the first or second rods.

Claim 25 (previously presented) The tool of claim 24 wherein:

the first rod includes a second radially extending shoulder outward of the rearward threaded portion of the first rod and the end cap includes a radially extending shoulder outward of the forward threaded portion of the end cap for engaging the second radially extending shoulder of the first rod.